· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)
Notice of Allowability	10/525 920	DUFFETT-SMITH ET AL.
	10/525,829 Examiner	Art Unit
	Anril S. Cuzman	2618
	April S. Guzman	2010
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>07/03/2007</u> .		
2. The allowed claim(s) is/are 1-21.		
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some* c) None of the:</li> </ul>		
1. 🔀 Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3.   Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1) ☐ hereto or 2) ☐ to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
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Attachment(s)	5 □ Notice of Info	rmal Patent Application
<ol> <li>Notice of References Cited (PTO-892)</li> <li>DNotice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>	<del>_</del>	• •
• •	Paper No./M	ail Date
<ol> <li>Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 02/25/2005</li> </ol>	7. ∐ Examiner's A	mendment/Comment
4. Examiner's Comment Regarding Requirement for Deposit	8. 🛭 Examiner's S	tatement of Reasons for Allowance
of Biological Material	9. 🗌 Other	
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## **DETAILED ACTION**

## Allowable Subject Matter

Claims 1-21 are allowed.

The following is an examiner's statement of reasons for allowance:

Consider claim 1, 14, 17, 18, and 20, the best prior art of record found during the examination of the present application, Ruutu et al. (U.S. Patent # 6,445,928), fails to specifically disclose, teach, or suggest a method, an apparatus, a telecommunications terminal including apparatus, a communication network, and a program code of estimating the time offsets between signals transmitted by plural transmitters of a communications network and received by a receiver attached to a terminal, the method comprising the steps of (a) creating a terminal section of a representation of the signals from the plural transmitters received by the receiver at the terminal; (b) creating a first section of a representation of the signal transmitted by a first of said transmitters, and creating a second section of a representation of the signal transmitted by a second of said transmitters, each of which sections overlaps in time with the terminal section; (c) using the first section, the second section and a set of signal parameters, including initial estimates of the time offsets between the first section and the terminal section and between the second section and the terminal section, to create a model of a section of a representation of the composite signal received by the receiver from the first and second transmitters; (d) comparing the model with the terminal section; (e) refining the set of signal parameters including the time offset estimates to minimize the difference between said model and the terminal section; and (f) adopting the time offsets in the refined parameter set used to minimize the difference between said model and the terminal section, as the estimated time

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offsets between the first section and the terminal section and between the second section and the terminal section.

However, Ruutu et al. teach a calculating method and a radio system comprising a set of emitters and a set of receivers and a measuring means, which measure the time difference between the reception moments of signals transmitted by the transmitted while the receiver is receiving signals, and which calculate the geometrical time difference of the signals transmitted by the transmitters. The calculating means calculate the real time difference between the transmitters in the coverage area of different receivers by using the already calculated time differences between the transmitters (Abstract). Ruutu et al. teach a set of transmitters 101-110, and a set of receivers 201-204. Each receiver is capable of receiving a signal from its own coverage area wherein the coverage areas overlap somewhat. A receiver, comprising a measuring means 10, which measures the time difference between the reception moments of the signals transmitted by the transmitters. The OTD can be determined in such a way that the arrival time of the signal arriving from the neighbor cell is subtracted from the arrival time of the signal coming from the neighbor cell. The measuring means 10 can calculate the geometrical time difference of the signals transmitted by the transmitter. The geometrical time difference can also be calculated in another network element, to which the receiver transmits its OTD measurement results, its identity or coordinates, as well as the identities or coordinates of the transmitters corresponding to the OTD measurement. The calculating means 11 further determine the real time difference of the transmission moment of the transmitter compared to the transmission moments of the other transmitters. If the cellular radio system comprises a subscriber terminal with the measuring means 10 to measure OTD values, the corresponding

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RTD values can be combined with this information in order to determine GTD values, which can be used to determine the location of the subscriber terminal (column 2 lines 66-67, column 3 lines 1-16, column 3 lines 44-67, and column 4 lines 47-57). These teachings clearly differ from the claimed invention, therefore, claims 1-21 of the present application are considered novel and nonobvious over the prior art and, consequently, are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any response to this Office Action should be faxed to (571) 273-8300 or mailed to:

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## Hand-delivered responses should be brought to

Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April S. Guzman whose telephone number is 571-270-1101. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lana Le can be reached on 571-272-7891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9-27-07

LANA LE

April S. Guzman

A.S.G/asg

09/19/07